

**THE LINK BETWEEN PERCEIVED HRM, ENGAGEMENT AND EMPLOYEE BEHAVIOR**  
**A MODERATED MEDIATION MODEL**

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## **ABSTRACT**

This study contributes to our understanding of the mediating and moderating processes through which human resource management practices are linked with behavioral outcomes. We developed and tested a moderated mediation model linking perceived human resource management practices to organizational citizenship behavior and turnover intentions. Drawing on social exchange theory, our model suggests that the effect of perceived human resource management practices on both outcome variables will be mediated by levels of employee engagement, while the relationship between employee engagement and both outcome variables will be moderated by perceived organizational support, trust and leader-member exchange. Data from 297 employees in a service sector organization in the UK largely support this model. This suggests that the enactment of positive behavioral outcomes, such as organizational citizenship behavior and intent to remain, largely depends on the wider organizational climate and employees' relationship with their line manager, lending support to a micro-contingency perspective in human resource management. Implications for practice and directions for future research are discussed.

Despite considerable advances in recent years in our understanding of how human resource management (HRM) might be linked with organizational performance, studies have highlighted two areas in particular where more research is needed. First, the importance of distinguishing between intended, implemented and perceived HRM practices has been noted. We cannot assume that simply capturing data on organizational HRM policy is sufficient to shed light on employees' experiences or beliefs (Conway & Monks, 2008; Gratton & Truss, 2003; Snape & Redman, 2010). As Nishi, Lepak and Schneider (2008) observed, individual perceptions of the aims and purposes of HRM policies and practices will inevitably vary. Thus far, relatively few studies have focused on individual experiences of HRM interventions, and so our understanding of how employees' perceptions of HRM practices are linked with performance outcomes is limited.

Second, although prior studies have introduced employee attitudes as mediating variables in the HRM-performance chain, they have so far failed to take into account how moderating variables might affect these relationships. Identifying moderators can help to explain more about the circumstances and processes through which employee attitudes are translated into desired or non-desired behaviors (Den Hartog, Boselie, & Paauwe, 2004). To date, Kuvaas' (2008) study is the only empirical investigation into the role of moderators in the HRM-performance chain. In the present study, we build upon Kuvaas' work to generate a moderated mediation model in which we suggest that HRM practices have a positive effect on behavioral outcomes through processes of both mediation and moderation. In developing our theoretical model, we draw on related research from the domain of employee engagement to explain how employee perceptions of HRM practices are related to employee engagement (Kahn, 1990; Rich, LePine, & Crawford, 2010). We base our analysis on social exchange theory, which suggests that engagement may play an important role in enhancing behavioral outcomes, mediating the effect of HRM practices

on employee behavior. Finally, we build on social exchange theory to explain how the indirect effect of perceived HRM practices on employee behavior through employee engagement is likely to be moderated by the perceived quality of the employee-organization (Allen, Shore, & Griffeth, 2003; Kuvaas, 2008), and the employee-line manager relationship (Kuvaas & Dysvik, 2010; Maertz, Griffeth, Campbell, & Allen, 2007).

Prior research on social exchange theory has primarily focused on perceived organizational support (POS) and leader-member exchange (LMX), with the organization and the supervisor being the two main social exchange relationships in which employees engage (Dulac, Coyle-Shapiro, Henderson, & Wayne, 2008; Eisenberger, Huntington, Hutchison, & Sowa, 1986; Hofmann & Morgeson, 1999; Wayne, Shore, & Liden, 1997). POS, as a measure of the employee-organization relationship, relates to employees' perceptions of their organization's commitment towards them and signals their beliefs about the extent to which the organization values their contributions and cares about their well-being (Eisenberger et al., 1986). LMX, or the relationship leaders establish with their followers, is a reflection of the perceived quality of the employee-line manager relationship (Graen & Uhl-Bien, 1995).

However, Blau (1964) in his conceptualization of social exchange theory emphasized the importance of trust as a macromotive and underlying foundation of relational contracts and social exchange. His understanding is echoed in the work by Eisenberger, Fasolo, and Davis-LaMastro (1990: 57) who argued that trust is a consequence of POS in that perceived support creates "[...] trust that the organization will fulfill its exchange obligations of noticing and rewarding employee efforts made on its behalf." To date, there has been a scarcity of studies examining the role of trust in developing and maintaining social exchange relationships (Aryee, Budhwar, & Zhen Xiong, 2002; Konovsky & Pugh, 1994). In this study we therefore aim to adopt a holistic

perspective on social exchange theory and analyze POS, trust and LMX as potential moderators in the link between employee engagement and employee behavior.

Following Katz's (1964) seminal paper, we take a multidimensional approach to job performance by distinguishing between two types of employee behavior (Rotundo & Sackett, 2002), namely organizational citizenship behavior (OCB) and turnover intentions. Not only are these dependent variables highly relevant to organizations, they also represent two different processes. Exhibiting the intention to turnover is characterized as a withdrawal process (Murphy, 1989). In contrast, citizenship behavior is an energizing and activating process, focused on enhancing and maintaining the social and psychological environment (Borman & Motowidlo, 1997; Organ, 1997). In our study we focus on organizational citizenship behavior towards the organization (OCB-O) rather than towards other employees (OCB-I), as POS and trust represent organizational-level variables. Moreover, supervisors can be seen as the personification of an organization by employees (Eisenberger, Stinglhamer, Vandenberghe, Sucharski, & Rhoades, 2002) so that we expect all three moderators to be related to OCB-O.

Recent commentators have argued that it is important to include the social context of organizations in any model analyzing the relationship between HRM practices and employee behavior (Guest, 2011; Kuvaas & Dysvik, 2010). Our paper answers these calls by introducing a moderated mediation model, where the link between HRM practices and employee behavior through employee engagement is moderated by POS, trust and LMX. Figure 1 schematically depicts this model. We test our model through questionnaire data obtained from 297 employees working for a service sector organization in the UK.

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This paper contributes to the HRM-performance literature in various ways. First, we introduce a contingency perspective into micro HRM research, and demonstrate the importance of bringing moderating variables, such as the employee-organization and employee-line manager relationships, into the equation. Our moderated mediation model shows that employees' experiences of POS, trust and LMX are critical components of the HRM-performance linkage. Second, we lend support to the small number of other studies which have demonstrated a link between positive experiences of HRM practices and individual level behavioral outcomes. Third, we show how employee engagement acts as a mediating variable in the link between HRM and performance. However, the extent to which engagement levels result in high levels of OCB-O and low turnover intentions largely depends on the moderating impact of POS, trust and LMX.

## **THEORETICAL BACKGROUND AND HYPOTHESES**

### **Perceived HRM and Performance**

Numerous commentators have sought to demonstrate that high-performance HRM practices can have a positive effect on individual and organizational performance (Boselie, Dietz, & Boon, 2005). Whilst most studies have involved large-scale surveys of single HRM practitioners (Combs, Yongmei, Hall, & Ketchen, 2006; Huselid, 1995), it has recently been noted that this approach does not capture employees' experiences of HRM practices, which should probably be regarded as more significant in the HRM-performance chain (Bowen & Ostroff, 2004; Conway &

Monks, 2008; Gerhart, 2005; Gerhart, Wright, McMahan, & Snell, 2000; Gratton & Truss, 2003; Kuvaas, 2008).

Inevitably, the way in which HRM strategies are implemented will vary within any one organizational setting, and will be perceived differently by diverse employees (Edgar & Geare, 2005; Khilji & Wang, 2006; Kuvaas, 2008; Wright & Haggerty, 2005). It is important, therefore, to focus on employees' perceptions of HRM processes rather than simply what is intended by employers, although prior research adopting this perspective is sparse (Nishii et al., 2008). To address this gap, we focus our study on employee perceptions of HRM practices.

Social exchange theory provides an explanatory framework to clarify how perceived HRM practices are linked to behavioral outcomes. Social exchange theory is based on norms of reciprocity within social relationships (Blau, 1964; Eisenberger et al., 1986; Rhoades & Eisenberger, 2002). It is argued that employees who receive economic or socio-emotional benefits from their organizations feel obligated to respond in kind (Saks, 2006). Previous studies have, for example, identified developmental HRM practices (Kuvaas & Dysvik, 2010; Wayne et al., 1997), organizational justice (Liden, Wayne, & Kraimer, 2003) and idiosyncratic deals (Anand, Vidyarthi, Liden, & Rousseau, 2010) as valuable resources given to the employee by their organizations. Employees can then reciprocate by demonstrating positive attitudes such as affective commitment (Eisenberger et al., 1990; Settoon, Bennett, & Liden, 1996), or engagement (Saks, 2006), and by demonstrating desired behaviors such as task-related (Cropanzano, Rupp, & Byrne, 2003; Muse, Harris, Giles, & Feild, 2008) and extra-role performance (Anand et al., 2010; Cropanzano et al., 2003; Liden et al., 2003), and low intent to quit (Cropanzano et al., 2003).

A firm's investment in beneficial HRM approaches such as high-performance HRM practices may be viewed as signaling an intent for long-term investment in employees that obligates them

to reciprocate with discretionary role behavior and contributions (Gong, Chang, & Cheung, 2010; Shaw, Dineen, Fang, & Vellella, 2009; Sun, Aryee, & Law, 2007). Prior research suggests that employees who have positive perceptions of their HRM practices exhibit more OCB-Os (Kuvaas & Dysvik, 2010; Nishii et al., 2008). Furthermore, Allen (2003) and Kuvaas (2008; 2010) reported that positive HRM perceptions were negatively related to turnover intentions. We therefore argue that:

*Hypothesis 1a: Perceived HRM practices are positively related to OCB-O.*

*Hypothesis 1b: Perceived HRM practices are negatively related to turnover intentions.*

### **The Mediating Influence of Employee Engagement on the HRM–Employee Behavior Relationship**

Whilst empirical findings have generally supported the notion that HRM practices are associated with individual and organizational outcomes, more recently commentators have sought to explore the mechanism through which HRM practices are linked to performance, and have proposed employee attitudes as potential mediators in the causal chain. Particularly, HRM practices have been linked to job satisfaction, affective and continuance commitment, and perceptions of procedural and interactional justice (Conway & Monks, 2008; Den Hartog et al., 2004; Kinnie, Hutchinson, Purcell, Rayton, & Swart, 2005; Kuvaas, 2008; Nishii et al., 2008; Snape & Redman, 2010; Takeuchi, 2009). However, to date, no research has examined whether HRM practices are linked with employee engagement.

The construct of employee engagement was first introduced by Kahn (1990) to signify the expression of self in-role, involving physical, cognitive and emotional dimensions, and has since



been the focus of extensive theoretical and empirical research (Alfes, Truss, Soane, Rees, & Gatenby, 2010; May, Gilson, & Harter, 2004; Rich et al., 2010; Salanova, Llorens, Cifre, Martínez, & Schaufeli, 2003; Salanova & Schaufeli, 2008; Schaufeli & Bakker, 2004; Schaufeli, Salanova, Gonzalez-Roma, & Bakker, 2002; Truss et al., 2006). Engagement is considered a multi-factorial behavioral, attitudinal and affective individual differences variable (Macey & Schneider, 2008; May et al., 2004; Schaufeli & Bakker, 2004).

Commentators have argued that engagement differs from other attitudinal and behavioral constructs, including those most commonly used in high-performance HRM practice studies, commitment and job satisfaction, in that it implies attentiveness to work and absorption in its performance (Macey & Schneider, 2008; Saks, 2006). Engagement has some associations with the concepts of discretionary effort and OCB-O (Campbell & Pritchard, 1976; Frank, Finnegan, & Taylor, 2004; Macey & Schneider, 2008), but refers to the extent to which individuals invest themselves in their work roles, which can be viewed more as an antecedent of task and citizenship performance rather than as synonymous with it (Bateman & Organ, 1983; Griffin, Parker, & Neal, 2008; Macey & Schneider, 2008; Rich et al., 2010; Saks, 2006).

Studies of engagement, like those of high-performance HRM practices, draw on social exchange theory to suggest that people will become engaged with their work through investing intellectual effort, experiencing positive emotions and meaningful connections with others (Alfes et al., 2010: 5) when antecedents are in place that signal to employees that they are valued and trusted (Rich et al., 2010; Saks, 2006). Empirical studies have demonstrated a link between high levels of engagement and the same outcomes as the high-performance HRM practices literature. Engaged employees invest themselves fully in their roles (Macey & Schneider, 2008), which may lead to the enactment of active in-task and citizenship performances. Engaged employees may

achieve higher performance because they focus their efforts on work-related goals, are cognitively vigilant, and emotionally and socially connected to their work (Kahn, 1990). Since engaged employees feel more spirited, they can accomplish their in-role tasks with less effort (Hockey, 2000), and additionally have resources to dedicate to OCBs (Sonnentag, 2003). Engagement also leads to higher levels of identification with a job which may make it difficult for employees to detach themselves from the role and leave the organization (Koyuncu, Burke, & Fiksenbaum, 2006; Rich et al., 2010). Hence, engaged employees are more likely to stay with their organizations and continue to invest themselves in their work.

This notion has been supported by recent studies. Salanova, Agut and Peiro (2005) demonstrated that organizational resources and work engagement predicted service climate, which in turn had an effect on employee performance and customer loyalty. In a study of 245 firefighters Rich et al. (2010) found that engagement mediated the relationship between value congruence, POS, core self-evaluations, and task performance and OCBs. Saks (2006) and Babcock-Roberson and Strickland (2010) found that engagement was related to higher levels of OCB, whilst Sonnentag (2003) demonstrated that engagement leads to proactive behavior, taking initiative, and the pursuit of learning goals. In a study of 1698 employees in the Dutch services industry Schaufeli and Bakker (2004) found that engagement was negatively related to turnover intentions and mediated the relationship between job resources and turnover intentions, which is consistent with other studies on engagement (Halbesleben & Wheeler, 2008; Koyuncu et al., 2006; Saks, 2006).

Following the preceding discussion, and to the extent that perceived HRM practices are positively related to employee engagement, which in turn is positively related to behavioral

outcomes, we expect the link between perceived HRM practices and employee behavior to be indirect and mediated by employee engagement. Thus:

*Hypothesis 2a: Employee engagement mediates the relationship between perceived HRM practices and OCB-O.*

*Hypothesis 2b: Employee engagement mediates the relationship between perceived HRM practices and turnover intentions.*

### **Moderators of the Engagement to Employee Behavior Relationship**

Social exchange theory suggests that employee perceptions of the quality of their employment exchange relationships are positively related to their willingness to act in a way that benefits the other party in the relationship (Blau, 1964; Emerson, 1976). Thus far, HRM theory and research have assumed that certain HRM practices signal an organization's willingness to invest in their employees, which in turn affects employees' perceptions of the individual-organization exchange relationship. In addition, research highlights the wider organizational climate as a relevant motivational basis influencing employee work outcomes (Cropanzano & Mitchell, 2005). Current perspectives on social exchange theory emphasize the relevance of POS, trust and LMX as central elements in a social exchange relationship (Aryee et al., 2002; Settoon et al., 1996). This suggests that POS, trust and LMX may act as distinct variables in the HRM-performance chain, moderating the effect of employee engagement on behavioral outcomes.

#### ***Perceived Organizational Support***

POS has been analyzed in the context of social exchange theory in a wide range of studies (Coyle-Shapiro & Conway, 2005; Eisenberger et al., 1990; Eisenberger et al., 1986; Settoon et al., 1996). POS relates to favorable organizational treatments such as attractive job conditions, empowerment and health and safety provisions. It also includes the degree of support available in dealing with difficult and stressful situations (Rhoades & Eisenberger, 2002). Employees evaluate the organizational motives behind these treatments. A positive evaluation of the motives and resources provided by the organization will encourage employees to reciprocate by exerting effort in their role, for example through engaging in more OCBs (Lynch, Eisenberger, & Armeli, 1999; Moorman, Blakely, & Niehoff, 1998) and exhibiting lower levels of intent to quit (Dawley, Houghton, & Bucklew, 2010; Guerrero & Herrbach, 2009).

Applying social exchange theory to the interaction effect between employee engagement and POS on individual behavior, we posit that employee attitudes are translated into actual employee behaviors taking into consideration the level of support that employees perceive to be provided by the organization. The norm of reciprocity suggests that employees who perceive that their organization provides them with a high level of support feel morally obliged to the organization. Hence, engaged employees who have positive perceptions of organizational support are more likely to translate their engagement into higher levels of OCB-O and lower levels of intent to quit. In contrast, engaged employees who feel that they receive low levels of support from their organization are less motivated to demonstrate the desired behaviors. Thus:

*Hypothesis 3a: The positive association between employee engagement and OCB-O is moderated by POS, such that it is stronger for higher than for lower levels of POS.*

*Hypothesis 3b: The negative association between employee engagement and turnover intentions is moderated by POS, such that it is stronger for lower than for higher levels of POS.*

### ***Trust***

Trust has been described as the basis of the relationship between two parties (Robinson & Rousseau, 1994). It relates to an individual's belief about the likelihood that the other party's future actions will be beneficial, favorable or at least not harmful to an individual's own interest (Robinson, 1996) and is therefore a crucial factor influencing behaviors within relationships (Blau, 1964). Trust in one's employer includes employee perceptions of the employer's integrity, motives, openness and behavioral consistency (Robinson & Rousseau, 1994) and has been linked to higher levels of citizenship performance (Colquitt, Scott, & LePine, 2007; Robinson, 1996; Robinson & Morrison, 1995) as well as lower turnover intentions (Aryee et al., 2002). Conversely, employees who experience their employer breaking a promise or who disagree with the motives underlying organizational actions are likely to feel that the employer has failed to fulfill obligations of the psychological contract, which is likely to result in lower levels of trust (Robinson, 1996).

Trust is a basic requirement in social exchange relationships as individuals may refuse to reciprocate if the other party does not prove itself as trustworthy (Blau, 1964). Hence, employees who feel that they have a high-trust relationship with their organization feel indebted to their organization so that their engagement will lead to higher citizenship performance and lower turnover intentions. In contrast, a low-trust relationship between employees and their

organizations is likely to impact negatively on whether employee attitudes actually translate in desired behavioral outcomes. Engaged employees who view their organization as otherwise untrustworthy may respond by demonstrating lower levels of OCBs and intending to leave their organization. Thus:

*Hypothesis 4a: The positive association between employee engagement and OCB-O is moderated by trust, such that it is stronger for higher than for lower levels of trust.*

*Hypothesis 4b: The negative association between employee engagement and turnover intentions is moderated by trust, such that it is stronger for lower than for higher levels of trust.*

### ***Leader-Member Exchange***

LMX theory is based on the premise that the exchange relationships that leaders develop with their followers differ with regard to the resources, information and support exchanged by both parties (Liden, Erdogan, Wayne, & Sparrowe, 2006; Wayne et al., 1997). Low quality relationships are characterized by low levels of trust and obligation, where followers only do what is defined as part of their job description (Graen & Uhl-Bien, 1995). Conversely, in high quality relationships, followers are motivated to go beyond their formal job requirements. Extant LMX research has demonstrated that the quality of the LMX relationship is linked to a range of individual and organizational outcomes, including citizenship performance and turnover intentions (Chun, Law, & Zhen Xiong, 1999; Dulac et al., 2008; Settoon et al., 1996; Venkataraman, Green, & Schleicher, 2010; Wayne et al., 1997).

LMX differentiation, or the variability in the quality of LMX relationships within teams, is a regular phenomenon in workplace settings, as leaders develop high quality relationships with some, but not all team members (Liden et al., 2006). High LMX is characterized by mutual trust, respect, liking and reciprocal influence (Liden & Maslyn, 1998). Supervisors offer influence and provide resources and support, which induces subordinates to reciprocate these benefits in order to maintain high LMX relationships (Graen & Scandura, 1987; Settoon et al., 1996). Supervisors also delegate more to employees they trust and enable them to participate in decision making (Bauer & Green, 1996; Scandura, Graen, & Novak, 1986). Moreover, employees in high LMX relationships receive challenging task assignments and training opportunities, and are provided with more information (Liden et al., 2006). Subordinates feel obliged to their leaders as representatives of the organization and respond by engaging in more OCBs.

Although engaged employees are fully engrossed with their jobs, their direct supervisors may have an important role to play in terms of whether an individual's activated or energetic condition is ultimately translated into behavioral outcomes. Engaged employees who have developed high-LMX relationships with their supervisors will reciprocate by demonstrating higher citizenship performance and lower turnover intentions. In contrast, engaged employees who feel that they have a low-quality LMX relationship with low levels of trust and support are likely to withdraw and respond with lower levels of performance and higher intentions to quit. Hence:

*Hypothesis 5a: The positive association between employee engagement and OCB-O is moderated by LMX, such that it is stronger for higher than for lower levels of LMX.*

*Hypothesis 5b: The negative association between employee engagement and turnover intentions is moderated by LMX, such that it stronger for lower than for higher levels of LMX.*

## METHODS

### Respondents and Procedures

We drew our sample from one division of a large UK service sector organization. The organization is a support services partner providing business solutions for clients across the local government, transport, education and defense sectors. Employees were asked to complete an online questionnaire that included independent, mediating, moderating and dependent variables as described below. Employees were informed about the purpose of the study and its confidentiality, and encouraged to participate in the survey within two weeks. All employee were given time to complete the survey at work.

540 employees were invited to take part in the survey. From this sample, 328 questionnaires were completed, a response rate of 61%. Deletion of missing values resulted in a usable sample of 297 employees. The sample comprised 47.8 percent men; the average age was 39.61 years (s.d. = 10.27); and the average tenure was 6.48 years (s.d. = 5.65).

### Measures

***Perceived HRM practices.*** We measured perceived HRM practices with a 9-item scale developed by Gould-Williams and Davies (2005). A sample item is, “I am provided with sufficient opportunities for training and development.” The response scale ranged from 1 (“strongly disagree”) to 7 (“strongly agree”). Cronbach’s Alpha was .77.

***Employee Engagement.*** We measured employee engagement with a 12-item scale adapted from Rich et al. (2010). A sample item is, “I feel positive about my work.” The response scale ranged from 1 (“strongly disagree”) to 7 (“strongly agree”). Cronbach’s Alpha was .88.



***Perceived organizational support.*** POS was measured with the 4-item, 7-point version of the Survey of Perceived Organizational Support (Eisenberger et al., 1986). Participants responded to items, such as “My organization shows concern for me.” Cronbach’s Alpha was .95.

***Trust.*** Trust was measured with a 7-item scale developed by Robinson and Rousseau (1994). An example item is, “I fully trust my employer”. The response scale ranged from 1 (“strongly disagree”) to 7 (“strongly agree”). Cronbach’s Alpha was .94.

***LMX.*** LMX was measured with Graen and Uhl-Bien’s (1995) 7-item, 7-point LMX measure. An example item is, “My working relationship with my leader is effective”. Cronbach’s Alpha was .92.

***Citizenship behavior.*** We measured OCB-O with a 4 item, 7-point frequency scale developed by Lee and Allen (2002). An example item is, “Offered ideas to improve the functioning of [the organization]”. Cronbach’s Alpha was .82.

***Turnover Intentions.*** We measured turnover intentions with a 2-items scale developed by Boroff and Lewin (1997). An example item is, “During the next year, I will probably look for a new job outside my current employer”. The response scale ranged from 1 (“strongly disagree”) to 7 (“strongly agree”). Cronbach’s Alpha was .95.

## **RESULTS**

### **Descriptive Statistics**

Table 1 presents the scale reliabilities, means and standard deviations for each scale, and inter-scale correlations for all study variables. The inter-scale correlations show the expected direction of association and, with one exception, are all significant at the  $p < .01$  level.

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### **Test of Hypotheses**

We used hierarchical multiple regressions to test hypotheses 1 and 2, and hierarchical moderated regression to test hypotheses 3 to 5. In all analyses, we entered the following control variables: age, gender, full time vs. part time, permanent vs. fixed term contract, and working hours. All variables were standardized to avoid multicollinearity (Aiken & West, 1991). Further, all variance inflation factors in the regressions were below 2. This suggests that multicollinearity was not problematic in the present study.

Hypothesis 1 stated that perceived HRM practices are positively related to OCB-O (H1a) and turnover intentions (H1b), whilst Hypothesis 2 proposed that engagement mediates the relationship between perceived HRM practices and OCB-O (H2a) and turnover intentions (H2b). According to Baron and Kenny (1986), four conditions are necessary to establish mediation. First, the independent and dependent variables must be significantly related. Second, the independent and mediator variables must be significantly related. Third, the mediator and the dependent variable must be significantly related and fourth, the relationship between the independent variable and dependent variable should be weaker (partial mediation) or non-significant (mediation) when the mediator is included in the regression equation. The regression results are presented in Table 2.

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Insert Table 2 about here  
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Results in Table 2 indicate that perceived HRM practices are significantly related to OCB-O, thereby lending support for H1a. Therefore, the first condition for mediation has been met. Results in Table 2 reveal further that perceived HRM practices are significantly related to engagement and that engagement is independently and significantly related to OCB-O, fulfilling the next two requirements. Finally, when both perceived HRM practices and engagement are entered into the model simultaneously, perceived HRM practices drops from significance indicating that engagement fully mediates the relationship between perceived HRM practices and OCB-O. When both variables are included in the model, the adjusted R-square indicates that 20 percent of the variance in OCB-O can be explained by our variables. Further, the model which includes both engagement and perceived HRM practices is a better fit to our data than the control variables alone (change in  $R^2 = .06$ ,  $p < .01$ ).

With regard to turnover intentions, column 6 of Table 2 reveals that perceived HRM practices are significantly and negatively related to turnover intentions, supporting H1b. The second condition for mediation has already been met; perceived HRM practices are significantly related to engagement. The last two columns show the remainder of the mediation tests. The table reveals that the main effect of engagement is significantly and negatively related to turnover intentions. When both the independent and mediator variables are put into the model together, both remain significant, although perceived HRM practices becomes weaker. This indicates partial mediation. The results also show that engagement and perceived HRM practices explain 40 percent of the variance in turnover intentions and that this is a significantly better fit than the model containing the control variables alone (change in  $R^2 = .395$ ,  $p < .01$ ).

To further assess the mediation, Sobel's test (1982) for indirect effects was conducted. The results show that the intervening effects of engagement on the relationship between perceived

HRM practices and OCB-O and turnover intentions were both significant ( $p < .05$ ). Therefore, H2a is supported, and H2b is partially supported.

Our next set of hypotheses predicted that the relationship between engagement and OCB-O as well as the relationship between engagement and turnover intentions would be moderated by POS (H3), trust (H4), and LMX (H5). To assess moderated mediation (Muller, Judd, & Yzerbyt, 2005; Preacher, Rucker, & Hayes, 2007), we examined the relationships and significance tests among five sets of variables. First, we examined the relationship of perceived HRM practices on OCB-O and turnover intentions. Second, we investigated whether there were significant interactions between engagement, and each of the three proposed moderators on OCB-O and turnover intentions, while controlling for perceived HRM practices. Third, we tested for a significant effect of engagement on OCB-O and turnover intentions. Fourth, we investigated whether there were different conditional indirect effects of perceived HRM practices on OCB-O and turnover intentions, mediated by engagement, across low and high levels of each of the three proposed moderators (POS, trust and LMX). Fifth, we examined whether the test of the mediation via engagement differs across the two levels (e.g., one standard deviation above and below the mean) of each of the proposed moderators (Preacher et al., 2007). Moderated mediation is demonstrated when the conditional indirect effect of perceived HRM practices on OCB-O and turnover intentions, through engagement, differs in strength across low and high levels of POS, trust, and LMX.

We have already presented results which demonstrated that perceived HRM practices are significantly related to OCB-O and turnover intentions (see Table 2). This supports the first condition for moderated mediation. To test for the second condition, we tested whether the interactions between engagement and each of the moderators were significant in predicting OCB-

O and turnover intentions. In accordance with Preacher et al. (2007) perceived HRM practices were held constant in each regression (e.g., controlled). Results of the moderated regressions of POS, trust and LMX and engagement on OCB-O and turnover intentions are shown in Table 3.

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Insert Table 3 about here  
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The results in Table 3 reveal that all three moderators, namely, POS, trust and LMX, interacted with engagement to predict OCB-O. Therefore, Hypotheses H3a, H4a and H5a were supported. The table also reveals that the interaction between POS and engagement on turnover intentions was significant, and the interaction between trust and engagement on turnover intentions was approaching significance ( $p = .08$ ). Hypotheses H3b and H4b were therefore supported. The interaction between leadership and engagement on turnover intentions was not significant. Hence, we did not find support for H5b.

The third condition for moderated mediation as set forth by Preacher et al. (2007) has already been supported; engagement is positively related to OCB-O and turnover intentions (see Table 2). To test the fourth condition, we examined whether the magnitude of the conditional indirect effect of perceived HRM practices through engagement was different at high versus low levels of each of the three moderator variables. Preacher et al.'s (2007) statistical significance test was used, whereby a z statistic was computed for the conditional indirect effect. Moderated mediation was tested separately for each moderator (POS, trust and LMX) on OCB-O and turnover intentions.

We operationalized high and low levels of each of the moderators as one standard deviation above and below the mean score. The estimates, standard errors, z statistics, and significance

values of the conditional indirect effects on OCB-O and turnover intentions across low and high levels of each of the moderators are presented in Table 4.

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The results shown in Table 4 reveal that the indirect effects of the moderators, namely, trust, LMX, and POS and engagement were significant at high levels for each moderator for OCB-O. For turnover, on the other hand, the results show that the effect of POS and trust and engagement was significant at low levels of each of the moderators. Plots for these interactions are found in Figure 2.

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## DISCUSSION

In response to calls for studies analyzing HRM practices in the context of their implementation within a broader organizational system (Guest, 2011; Wright & Boswell, 2002), we explored processes of mediation and moderation linking perceived HRM practices to OCB-O and turnover intentions. We proposed that employee engagement mediates the relationship between perceived HRM practices and these outcome variables and, further, that the strength of the association between employee engagement and individual behavior depends on employees' experiences of POS, trust and LMX. Data from 297 employees in a service sector organization in the UK support our model. The results have several theoretical and practical implications, which we consider in turn.

Our findings suggest that employee engagement acts as a significant mediating variable linking perceived HRM practices to employee behavior. By introducing a new mediator in the HRM-performance chain, we extend previous research, which has mainly focused on commitment, and job satisfaction as attitude variables (Conway & Monks, 2009; Nishii et al., 2008). In line with the emphasis on positive organizational phenomena (Hallberg & Schaufeli, 2006; Luthans, 2002; May et al., 2004), there has been a rising interest in employee engagement within the academic literature. However, despite the importance of engagement in creating a positive working environment, few studies have analyzed the relevance of engagement within an HRM context. Our results reveal that engagement has a pivotal role to play within the HRM-performance chain. We therefore encourage future studies to incorporate employee engagement as a mediating mechanism through which HRM practices influence individual and organizational performance variables.

Our findings also lend support to a micro contingency perspective within HRM research (Kuvaas, 2008). Data from our study suggest that, besides HRM practices, organizational variables impact upon employee attitudes and behavior through employee perceptions and interpretations of the working climate. The extent to which high levels of engagement lead to positive behaviors is contingent upon the employee-organization and the employee-line manager relationships. We found that the positive relationship between engagement and OCB-O was enhanced if POS, trust and LMX were high. Conversely, we also found that the negative association between employee engagement and turnover was aggravated when POS and trust were low. These results highlight the importance of considering the HRM-performance chain holistically. Furthermore, the extant literature has largely focused on main effect relationships while ignoring the potential interactive effects on the HRM-performance chain. The present

study, therefore, contributes to the literature by examining three such moderators, namely, POS, trust and LMX. Future research could further analyze how contextual variables can foster individual and collective perceptions of the work climate as moderators on the relationship between individual attitudes and behaviors.

Finally, our findings lend further support to previous studies emphasizing the importance of differentiating between intended versus perceived HRM practices. Our study shows that where employees' perceptions of HRM practices are positive, individual behavior in terms of citizenship performance is enhanced and turnover intentions are decreased. Hence, it is not the HRM strategies intended by the organization that are most significant for improving individual performance, but rather how employees experience those HRM practices (Gratton & Truss, 2003; Kinnie et al., 2005; Nishii et al., 2008). Consequently, this lends further weight to the argument that studies of the HRM-performance linkage need to seek the views not just of HRM managers, but also of individual employees (Den Hartog et al., 2004; Wright & Boswell, 2002).

In practical terms, our results indicate that organizations need to be aware that, in addition to certain sets of HRM practices, the wider organizational climate is critical to establishing a positive environment in which employees are willing to engage and enact their engagement in higher levels of performance and lower turnover intentions. Although employees who have positive perceptions of the HRM practices in their organization demonstrate higher levels of engagement, the extent to which they trust their organization and feel supported as well as their relationship with their line manager eventually determines whether they engage in more OCB-Os and want to remain with their employer. Hence, HRM and organizational managers need to create an environment in which employees feel valued, respected and treated fairly.



Our results also give interesting insights into the changing relationship between HRM professionals and line managers. Line managers play an important role in the HRM-performance chain. Whilst this has often been neglected in previous HRM research, it is only through collaboration between both parties that HRM practices can yield positive outcomes (Purcell & Hutchinson, 2007). Hence, HRM professionals need to work closely with line managers to ensure that HRM practices are implemented effectively and that line managers, in their day to day interaction with employees, create a positive and trustful working atmosphere.

Arguably, the objective of strategic HRM is to evoke positive employee attitudes and improve individual and organizational performance. The crucial question for HRM professionals is how to manage this process to achieve those objectives. Our results show that employee perceptions of HRM practices play an important role in raising levels of employee engagement, which, in conjunction with POS, trust and LMX, can lead to higher levels of individual performance. Creating a highly engaged workforce has become a significant focus for many organizations recently (MacLeod & Clarke, 2009; Truss, Soane, Alfes, Rees, & Gatenby, 2010), and our study shows that HRM professionals, line and senior manager have to work together to create a virtuous cycle in which employee become engaged and perform.

Although our research provides interesting insights into the moderating effect of the employee-organization and employee-line manager relationships on the HRM-performance chain, our results should be assessed against the background of the limitations inherent in our study. First, we collected data at one point in time, which limits the conclusions that can be made regarding the causal order of our relationships. We would therefore welcome experimental or longitudinal research designs to substantiate the causality of our hypotheses.

Second, we relied on individuals' self-reports on all variables of our model which raises the concern of possible common method bias. However, the focus in our current study was on employee perceptions of HRM, their organization and their line managers and so we would argue that self-report measures might actually be the most valid measurement method for most of our variables, as individuals are best placed to report their own levels of engagement, their perceptions of HRM practices, the organizational climate and line manager behavior. Moreover, employees are positioned to report their intentions to stay with their current employer. Hence, the only construct which could have been measured by multiple data sources is OCB-O. Although at least two data sources are required to help rule out the validity threats of self report and single-method bias (Donaldson & Grant-Vallone, 2002), a recent review of performance appraisal research suggests that performance rating by line managers might be as biased as self-rated performance (Levy & Williams, 2004). Moreover, authors have recently questioned the assumption that common-method variance causes serious problems in organizational research (Spector, 2006). Nevertheless, we encourage future researchers to collect data from multiple sources to investigate our findings further.

Our study has contributed to debates around the role of HRM in influencing employee behavior. We did so through the development and testing of a moderated mediation model. Specifically, we introduced employee engagement as a key attitudinal variable, and introduced the employee-organization as well as employee-line manager relationships as vital elements in this causal chain. We tested our model on a sample of 297 employees in a service sector organization in the UK to determine how these factors were interrelated. We found that employee engagement mediated the relationship between perceived HRM practices and two indicators of employee behavior, namely OCB-O and turnover intentions. We further found that POS, trust

and LMX moderated the link between engagement and these outcome variables. The findings are consistent with the central propositions of social exchange theory, which suggests that organizations that are able to cultivate a climate of reciprocity will likely elicit positive attitudinal and behavioral outcomes from employees. We posit that HRM's impact on performance outcomes is indirect rather than direct, and that the enactment of positive attitudes in desirable employee behavior largely depends on the wider organizational climate. The implications for HRM professionals are at least threefold. First, they should create a positive and trustful working environment. Second, they should develop and enact fair and consistent HRM practices. Third, they should work towards developing and implementing employee engagement strategies. These interventions will mutually reinforce each other to help organizations sustain a high-performing work culture.

TABLES AND FIGURES

**TABLE 1**  
**Descriptive Statistics, Correlations and Scale Reliabilities for Scale Variables<sup>a</sup>**

|                       | Alpha | Mean | SD   | 1      | 2      | 3      | 4      | 5      | 6    |
|-----------------------|-------|------|------|--------|--------|--------|--------|--------|------|
| 1 HRM Practices       | .77   | 4.65 | 1.15 |        |        |        |        |        |      |
| 2 Engagement          | .88   | 5.73 | .65  | .47**  |        |        |        |        |      |
| 3 POS                 | .95   | 4.82 | 1.24 | .68**  | .56**  |        |        |        |      |
| 4 Trust               | .94   | 5.13 | 1.09 | .65**  | .55**  | .83**  |        |        |      |
| 5 LMX                 | .92   | 5.56 | 1.03 | .52**  | .50**  | .51**  | .49**  |        |      |
| 6 OCB-O               | .82   | 4.29 | 1.26 | .20**  | .31**  | .21**  | .19**  | .16**  |      |
| 7 Turnover Intentions | .95   | 2.41 | 1.59 | -.49** | -.40** | -.50** | -.50** | -.42** | -.04 |

<sup>a</sup> n=297

\*\*p < .01; Note: The reliability for turnover intentions is expressed as a Spearman Brown coefficient because it is a 2-item measure.

**TABLE 2**  
**Hierarchical Regression Results for Testing Mediation**

| Variables and Statistic               | OCB-O      |           |           |           | Turnover Intentions |           |           |
|---------------------------------------|------------|-----------|-----------|-----------|---------------------|-----------|-----------|
|                                       | Engagement | Step 1    | Step 2    | Step 3    | Step 1              | Step 2    | Step 3    |
| Gender                                | -.05       | .08       | .11       | .09       | .13                 | .02       | .12       |
| Age                                   | -.05       | .03       | .05       | .04       | .02                 | -.03      | .01       |
| Full time                             | -.25       | .06       | .08       | .06       | .09                 | .01       | .08       |
| Permanent contract                    | -.13*      | -.11      | -.07      | -.08      | .04                 | -.03      | .01       |
| Working hours                         | .17*       | .25**     | .19*      | .21**     | -.02                | .12       | .03       |
| HRM Practices                         | .50**      | .21**     |           | .12       | -.60**              |           | -.45**    |
| Engagement                            |            |           | .25**     | .20**     |                     | -.52**    | -.31**    |
| F                                     | 12.79**    | 6.93**    | 7.91**    | 7.16**    | 17.34**             | 12.53**   | 19.99**   |
| R <sup>2</sup> (Adj. R <sup>2</sup> ) | .27 (.25)  | .17 (.14) | .19 (.16) | .20 (.17) | .34 (.32)           | .27 (.25) | .40 (.38) |

*Note: \*\*p < .01, \*p < .05; Control variables include gender, age, full time, permanent contract, and working hours.*

**TABLE 3**  
**Regression Results for Testing Moderation on OCB-O and Turnover Intentions**

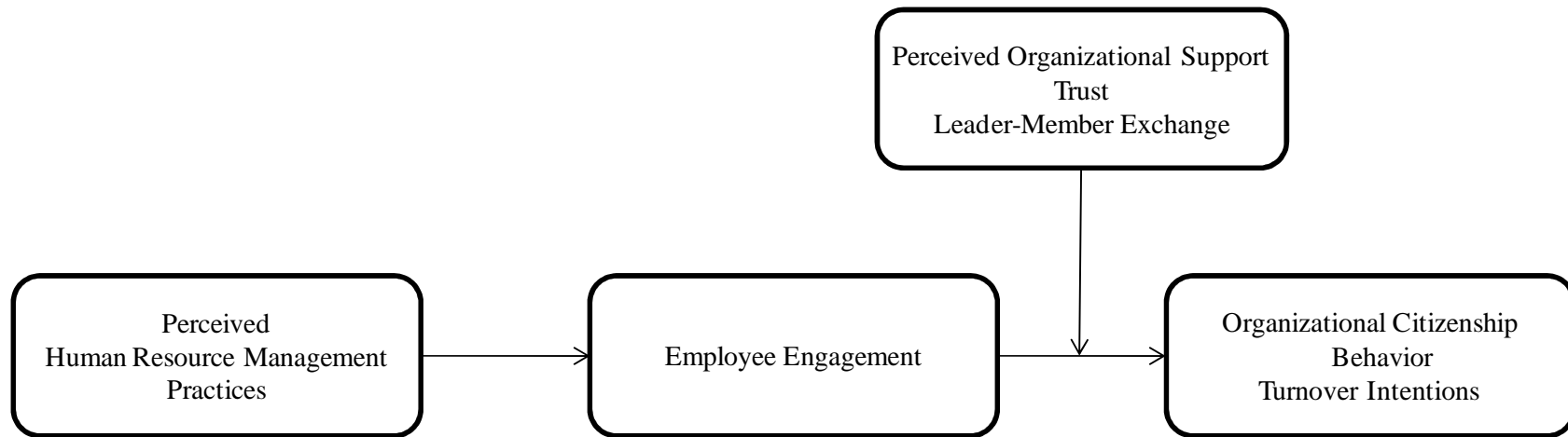
| Step | Variables          | OCB-O |  |         | Turnover Intentions |  |          |
|------|--------------------|-------|--|---------|---------------------|--|----------|
|      |                    | B     | R <sup>2</sup> (adj. R <sup>2</sup> )<br>sig of $\Delta R^2$ | F       | B                   | R <sup>2</sup> (adj. R <sup>2</sup> )<br>sig of $\Delta R^2$ | F        |
| 1    | Control variables  |       | .17(.14)***  | 6.93*** |                     | .34(.32)***  | 17.34*** |
| 2    | Engagement         | .31** | .20(.17)**   | 7.16*** | -.63***             | .40(.38)***  | 19.99*** |
| 3    | Engagement         | .30*  | .20(.16)   | 6.23*** | -.43***             | .45(.43)***  | 20.81*** |
|      | POS                | .01   |  |         | -.55***             |  |          |
| 4    | Engagement         | .35** | .23(.19)**   | 6.64*** | -.40***             | .46(.44)*  | 19.55*** |
|      | POS                | .07   |  |         | -.50***             |  |          |
|      | Engagement X POS   | .28** |  |         | .25*                |  |          |
| 1    | Control variables  |       | .17(.14)***  | 6.93*** |                     | .32(.32)***  | 17.34*** |
| 2    | Engagement         | .31** | .20(.17)**   | 7.16*** | -.63***             | .40(.38)***  | 19.99*** |
| 3    | Engagement         | .35** | .20(.17)   | 6.33*** | .43***              | .45(.42)***  | 20.59*** |
|      | Trust              | -.10  |  |         | .51***              |  |          |
| 4    | Engagement         | .37** | .23(.20)**   | 6.78*** | -.42***             | .45(.43)†  | 18.81*** |
|      | Trust              | -.04  |  |         | -.48***             |  |          |
|      | Engagement X Trust | .29** |  |         | .18†                |  |          |
| 1    | Control variables  |       | .17(.14)***  | 6.93*** |                     | .34(.32)***  | 17.34*** |
| 2    | Engagement         | .31** | .20(.17)***  | 7.16*** | .63***              | .40(.38)***  | 19.99*** |
| 3    | Engagement         | .28*  | .20(.17)   | 6.23*** | .56***              | .41(.39)   | 17.85*** |
|      | LMX                | .07   |  |         | .20                 |  |          |
| 4    | Engagement         | .29*  | .21(.18)*  | 6.18*** | -.56***             | .41(.39)   | 15.85*** |
|      | LMX                | .06   |  |         | -.20                |  |          |
|      | Engagement X LMX   | .23*  |  |         | -.07                |  |          |

*Note: \*\*p < .01, \*p < .05, † p < .10; Control variables include gender, age, full time, permanent contract, working hours, and perceived HRM practices.*

**TABLE 4**  
**Moderated Mediation Results for Engagement across Levels of Trust, POS, and LMX on OCB-O and Turnover Intentions**

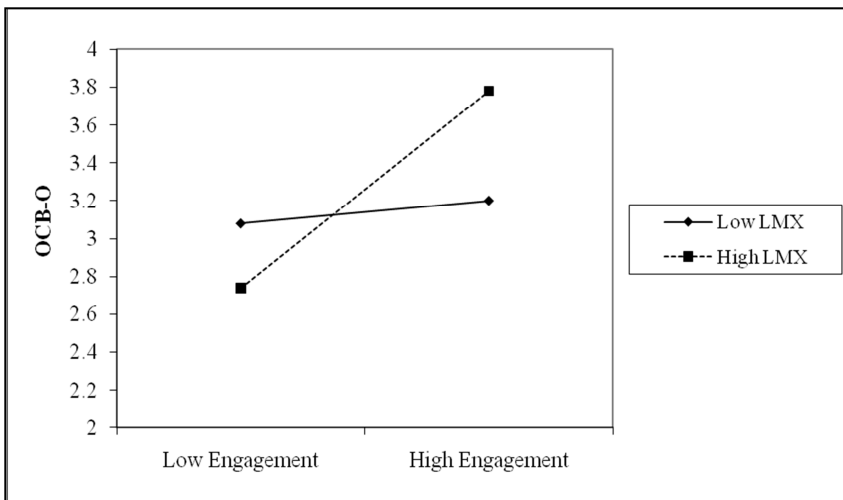
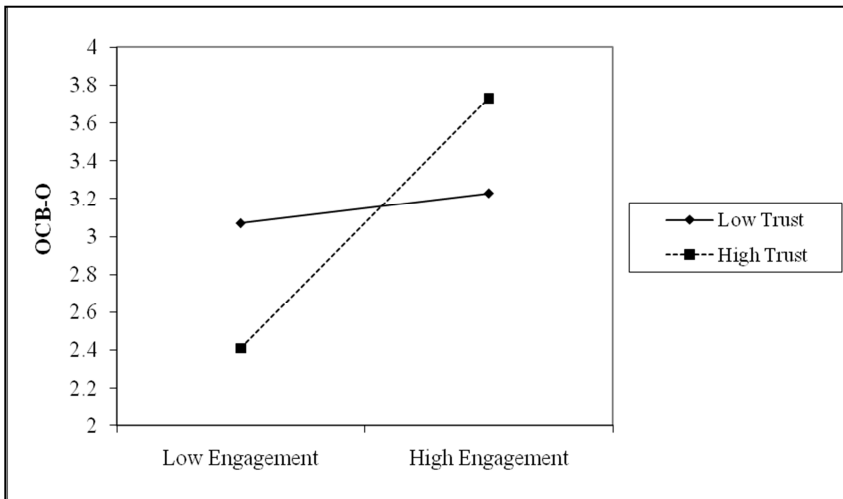
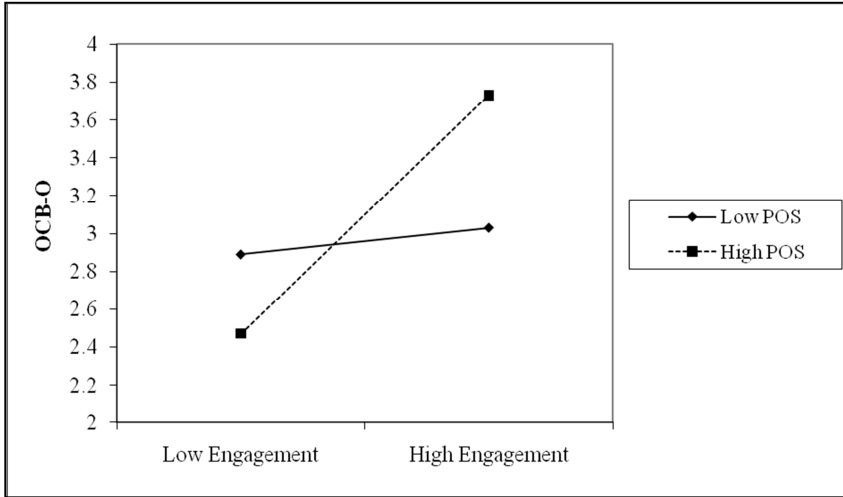
| Moderator | Level | OCB-O                       |     |      |      | Turnover Intentions         |     |       |      |
|-----------|-------|-----------------------------|-----|------|------|-----------------------------|-----|-------|------|
|           |       | Conditional indirect effect | SE  | Z    | P    | Conditional indirect effect | SE  | Z     | p    |
| POS       | High  | .22                         | .07 | 3.41 | <.01 | .03                         | .07 | .46   | .64  |
|           | Low   | .04                         | .05 | .82  | .41  | -.19                        | .06 | -3.17 | <.01 |
| Trust     | High  | .23                         | .06 | 3.61 | <.01 | -.01                        | .07 | -.07  | .94  |
|           | Low   | .05                         | .05 | 1.07 | .29  | -.17                        | .06 | -2.79 | <.01 |
| LMX       | High  | .18                         | .06 | 2.95 | <.01 | -.11                        | .07 | -1.59 | .11  |
|           | Low   | .05                         | .05 | 1.10 | .27  | -.15                        | .06 | -2.53 | .01  |

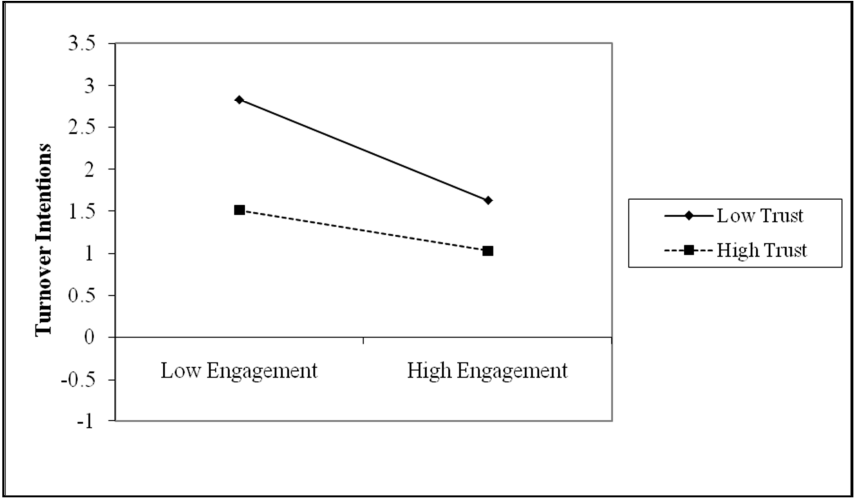
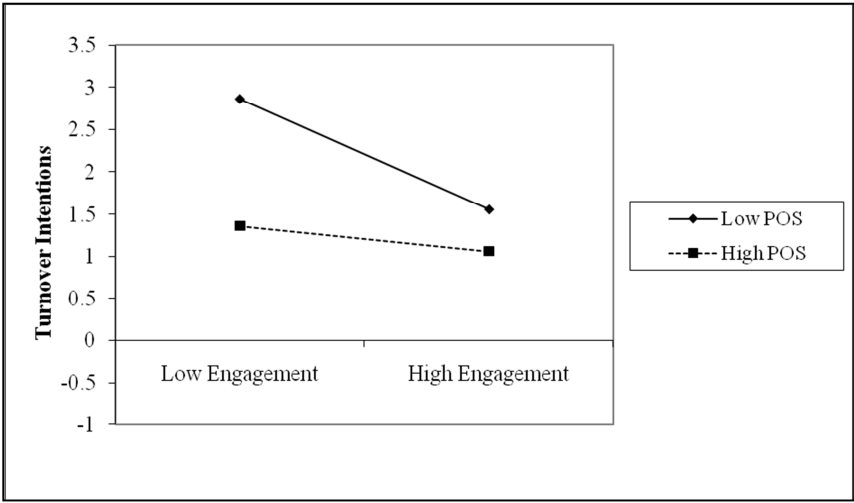
**FIGURE 1**  
**Moderated Mediation Model Linking Perceived HRM Practices to Employee Behavior**





**FIGURE 2**  
**Plots of moderated relationships**





## REFERENCES

- Aiken, L. S., & West, S. G. 1991. *Multiple Regression: Testing and Interpreting Interactions*. Newbury Park: Sage.
- Alfes, K., Truss, C., Soane, E. C., Rees, C., & Gatenby, M. 2010. *Creating an Engaged Workforce*. Wimbledon: CIPD.
- Allen, D. G., Shore, L. M., & Griffeth, R. W. 2003. The Role of Perceived Organizational Support and Supportive Human Resource Practices in the Turnover Process. *Journal of Management*, 29: 99-118.
- Anand, S., Vidhyarthi, P. R., Liden, R. C., & Rousseau, D. M. 2010. Good citizens in poor-quality relationships. Idiosyncratic deals as a substitute for relationship quality. *Academy of Management Journal*, 53: 970-988.
- Aryee, S., Budhwar, P. S., & Zhen Xiong, C. 2002. Trust as a mediator of the relationship between organizational justice and work outcomes: test of a social exchange model. *Journal of Organizational Behavior*, 23: 267-285.
- Babcock-Roberson, M. E., & Strickland, O. J. 2010. The relationship between charismatic leadership, work engagement and organizational citizenship behaviors. *Journal of Psychology*, 144: 313-326.
- Baron, R. M., & Kenny, D. A. 1986. The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51: 1173-1182.
- Bateman, T. S., & Organ, D. W. 1983. Job Satisfaction and the Good Soldier: The Relationship Between Affect and Employee "Citizenship". *Academy of Management Journal*, 26: 587-595.
- Bauer, T. N., & Green, S. G. 1996. Development of a leader-member exchange. A longitudinal test. *Academy of Management Journal*, 39: 1538-1567.
- Blau, P. M. 1964. *Exchange and Power in Social Life*. New York: Wiley.
- Borman, W. C., & Motowidlo, S. J. 1997. Task Performance and Contextual Performance: The Meaning for Personnel Selection Research. *Human Performance*, 10: 99-109.
- Boroff, K. E., & Lewin, D. 1997. Loyalty, Voice, and Intent to exit a union firm. A conceptual and empirical analysis. *Industrial & Labor Relations Review*, 51: 50-63.
- Boselie, P., Dietz, G., & Boon, C. 2005. Commonalities and contradictions in HRM and performance research. *Human Resource Management Journal*, 15: 67-94.
- Bowen, D. E., & Ostroff, C. 2004. Understanding HRM-Firm Performance Linkages: The Role of the "Strength" of the HRM System. *Academy of Management Review*, 29: 203-221.
- Campbell, J. P., & Pritchard, R. D. 1976. Motivation theory in industrial and organizational psychology. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology*, vol. 63-130. Chicago: Rand McNally.
- Chun, H., Law, K. S., & Zhen Xiong, C. 1999. A Structural Equation Model of the Effects of Negative Affectivity, Leader-Member Exchange, and Perceived Job Mobility on In-role and Extra-role Performance: A Chinese Case. *Organizational Behavior & Human Decision Processes*, 77: 3-21.
- Colquitt, J. A., Scott, B. A., & LePine, J. A. 2007. Trust, Trustworthiness, and Trust Propensity: A Meta-Analytic Test of Their Unique Relationships With Risk Taking and Job Performance. *Journal of Applied Psychology*, 92: 909-927.

- Combs, J., Yongmei, L., Hall, A., & Ketchen, D. 2006. How much do high-performance work practices matter? A meta-analysis of their effects on organizational performance. *Personnel Psychology*, 59: 501-528.
- Conway, E., & Monks, K. 2008. HR practices and commitment to change: an employee-level analysis. *Human Resource Management Journal*, 18: 72-89.
- Conway, E., & Monks, K. 2009. Unravelling the complexities of high commitment: an employee-level analysis. *Human Resource Management Journal*, 19: 140-158.
- Coyle-Shapiro, J. A. M., & Conway, N. 2005. Exchange relationships: Examining psychological contracts and perceived organizational support. *Journal of Applied Psychology*, 90: 774-781.
- Cropanzano, R., Rupp, D. E., & Byrne, Z. S. 2003. The Relationship of Emotional Exhaustion to Work Attitudes, Job Performance, and Organizational Citizenship Behaviors. *Journal of Applied Psychology*, 88: 160-169.
- Cropanzano, R., & Mitchell, M. S. 2005. Social Exchange Theory: An Interdisciplinary Review. *Journal of Management*, 31: 874-900.
- Dawley, D., Houghton, J. D., & Bucklew, N. S. 2010. Perceived Organizational Support and Turnover Intention: The Mediating Effects of Personal Sacrifice and Job Fit. *Journal of Social Psychology*, 150: 238-257.
- Den Hartog, D. N., Boselie, P., & Paauwe, J. 2004. Performance Management. A Model and Research Agenda. *Applied Psychology*, 53: 556-569.
- Donaldson, S. I., & Grant-Vallone, E. J. 2002. Understanding self-report bias in organizational behavioral research. *Journal of Business & Psychology*, 17: 245-260.
- Dulac, T., Coyle-Shapiro, J. A. M., Henderson, D. J., & Wayne, S. J. 2008. Not all responses to breach are the same. The interconnection of social exchange and psychological contract processes in organizations. *Academy of Management Journal*, 51: 1079-1098.
- Edgar, F., & Geare, A. 2005. HRM practice and employee attitudes: different measures different results. *Personnel Review*, 34: 534-549.
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. 1986. Perceived Organizational Support. *Journal of Applied Psychology*, 71: 500-507.
- Eisenberger, R., Fasolo, P., & Davis-LaMastro, V. 1990. Perceived Organizational Support and Employee Diligence, Commitment, and Innovation. *Journal of Applied Psychology*, 75: 51-59.
- Eisenberger, R., Stinglhamer, F., Vandenberghe, C., Sucharski, I. L., & Rhoades, L. 2002. Perceived Supervisor Support: Contributions to Perceived Organizational Support and Employee Retention. *Journal of Applied Psychology*, 87: 565-573.
- Emerson, R. M. 1976. Social exchange theory. *Annual Review of Sociology*, 2: 335-362.
- Frank, F. D., Finnegan, R. P., & Taylor, C. R. 2004. The Race for Talent: Retaining and Engaging Workers in the 21st Century. *Human Resource Planning*, 27(3): 12-25.
- Gerhart, B., Wright, P. M., McMahan, G. C., & Snell, S. A. 2000. Measurement Error in Research on Human Resources and Firm Performance: How much Error is there and how does it influence Effect Size Estimates? *Personnel Psychology*, 53: 803-834.
- Gerhart, B. 2005. Human Resources and Business Performance: Findings, Unanswered Questions, and an Alternative Approach. *Management Review*, 16: 174-185.
- Gong, Y., Chang, S., & Cheung, S.-Y. 2010. High performance work system and collective OCB: a collective social exchange perspective. *Human Resource Management Journal*, 20: 119-137.

- Gould-Williams, J., & Davies, F. 2005. Using social exchange theory to predict the effects of HRM practice on employee outcomes. *Public Management Review*, 7: 1-24.
- Graen, G. B., & Scandura, T. A. 1987. Toward a psychology of dyadic organizing. *Research in Organizational Behavior*, 9: 175-208.
- Graen, G. B., & Uhl-Bien, M. 1995. Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *The Leadership Quarterly*, 6: 219-247.
- Gratton, L., & Truss, C. 2003. The three-dimensional people strategy: Putting human resources policies into action. *Academy of Management Executive*, 17: 74-86.
- Griffin, M. A., Parker, S. K., & Neal, A. 2008. Behavioral Engagement a Distinctive and Useful Construct. *Industrial and Organizational Psychology*, 1: 48-51.
- Guerrero, S., & Herrbach, O. 2009. Manager organizational commitment: a question of support or image? *International Journal of Human Resource Management*, 20: 1536-1553.
- Guest, D. E. 2011. Human resource management and performance: still searching for some answers. *Human Resource Management Journal*, 21: 3-13.
- Halbesleben, J. R. B., & Wheeler, A. R. 2008. The relative roles of engagement and embeddedness in predicting job performance and intention to leave. *Work and Stress*, 22: 242-256.
- Hallberg, U., & Schaufeli, W. B. 2006. Same same but different? Can work engagement be discriminated from job involvement and organisational commitment? *European Psychologist*, 11: 119-127.
- Hockey, G. R. J. 2000. Work environments and performance. In N. Chmiel (Ed.), *Work and organizational psychology a European perspective*: 206-230. Oxford: Basil Blackwell.
- Hofmann, D. A., & Morgeson, F. P. 1999. Safety-Related Behavior as a Social Exchange: The Role of Perceived Organizational Support and Leader-Member Exchange. *Journal of Applied Psychology*, 84: 286-296.
- Huselid, M. A. 1995. The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal*, 38: 635-672.
- Kahn, W. A. 1990. Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33: 692-724.
- Katz, D. 1964. The Motivational Basis of Organizational Behavior. *Behavioral Science*, 9: 131-146.
- Khilji, S. E., & Wang, X. 2006. 'Intended' and 'implemented' HRM: the missing linchpin in strategic human resource management research. *International Journal of Human Resource Management*, 17: 1171-1189.
- Kinnie, N., Hutchinson, S., Purcell, J., Rayton, B., & Swart, J. 2005. Satisfaction with HR practices and commitment to the organisation: why one size does not fit all. *Human Resource Management Journal*, 15: 9-29.
- Konovsky, M. A., & Pugh, S. D. 1994. Citizenship Behavior and Social Exchange. *Academy of Management Journal*, 37: 656-669.
- Koyuncu, M., Burke, R., J., & Fiksenbaum, L. 2006. Work engagement among women managers and professionals in a Turkish bank. *Equal Opportunities International*, 25: 299-310.

- Kuvaas, B. 2008. An Exploration of How the Employee–Organization Relationship Affects the Linkage Between Perception of Developmental Human Resource Practices and Employee Outcomes. *Journal of Management Studies*, 45: 1-25.
- Kuvaas, B., & Dysvik, A. 2010. Exploring alternative relationships between perceived investment in employee development, perceived supervisor support and employee outcomes. *Human Resource Management Journal*, 20: 138-156.
- Lee, K., & Allen, N. J. 2002. Organizational citizenship behavior and workplace deviance: The role of affect and cognitions. *Journal of Applied Psychology*, 87: 131-142.
- Levy, P. E., & Williams, J. R. 2004. The Social Context of Performance Appraisal: A Review and Framework for the Future. *Journal of Management*, 30: 881-905.
- Liden, R., C., Wayne, S. J., & Kraimer, M., L. 2003. The dual commitments of contingent workers: An examination of contingents' commitment to the agency and the organization. *Journal of Organizational Behavior*, 24: 609-625.
- Liden, R. C., & Maslyn, J. M. 1998. Multidimensionality of Leader-Member Exchange: An Empirical Assessment through Scale Development. *Journal of Management*, 24: 43-72.
- Liden, R. C., Erdogan, B., Wayne, S. J., & Sparrowe, R. T. 2006. Leader-member exchange, differentiation, and task interdependence: implications for individual and group performance. *Journal of Organizational Behavior*, 27: 723-746.
- Luthans, F. 2002. The need for and meaning of positive organizational behavior. *Journal of Organizational Behavior*, 23: 695-706.
- Lynch, P. D., Eisenberger, R., & Armeli, S. 1999. Perceived Organizational Support: Inferior Versus Superior Performance by Wary Employees. *Journal of Applied Psychology*, 84: 467-483.
- Macey, W., & Schneider, B. 2008. The Meaning of Employee Engagement. *Industrial and Organizational Psychology*, 1: 3-30.
- MacLeod, D., & Clarke, N. 2009. Engaging for Success: Enhancing Performance through Employee Engagement. London: Office of Public Sector Information.
- Maertz, C. P., Griffeth, R. W., Campbell, N. S., & Allen, D. G. 2007. The effects of perceived organizational support and perceived supervisor support on employee turnover. *Journal of Organizational Behavior*, 28: 1059–1075.
- May, D. R., Gilson, R. L., & Harter, L. M. 2004. The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational & Organizational Psychology*, 77: 11-37.
- Moorman, R. H., Blakely, G. L., & Niehoff, B. P. 1998. Does perceived organizational support mediate the relationship between procedural justice and organizational citizenship behavior? *Academy of Management Journal*, 41: 351-357.
- Muller, D., Judd, C. M., & Yzerbyt, V. Y. 2005. When Moderation Is Mediated and Mediation Is Moderated. *Journal of Personality & Social Psychology*, 89: 852-863.
- Murphy, K. R. 1989. Dimensions of Job Performance. In R. Dillon & J. Pellingrino (Eds.), *Testing. Applied and theoretical perspectives*: 218-247. New York: Praeger.
- Muse, L., Harris, S. G., Giles, W. F., & Feild, H. S. 2008. Work-life benefits and positive organizational behavior: Is there a connection? *Journal of Organizational Behavior*, 29: 171-192.
- Nishii, L. H., Lepak, D. P., & Schneider, B. 2008. Employee Attributions of the "Why" of HR Practices: Their Effects on Employee Attitudes and Behaviors, and Customer Satisfaction. *Personnel Psychology*, 61: 503-545.

- Organ, D. W. 1997. Organizational Citizenship Behavior: It's Construct Clean-Up Time. *Human Performance*, 10: 85-97.
- Preacher, K. J., Rucker, D. D., & Hayes, A. F. 2007. Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, 42: 185-227.
- Purcell, J., & Hutchinson, S. 2007. Front-line managers as agents in the HRM-performance causal chain: theory, analysis and evidence. *Human Resource Management Journal*, 17: 3-20.
- Rhoades, L., & Eisenberger, R. 2002. Perceived Organizational Support: A Review of the Literature. *Journal of Applied Psychology*, 87: 698-714.
- Rich, B. L., LePine, J. A., & Crawford, E. R. 2010. Job Engagement. Antecedents and Effects on Job Performance. *Academy of Management Journal*, 53: 617-635.
- Robinson, S. L., & Rousseau, D. M. 1994. Violating the psychological contract: not the exception but the norm. *Journal of Organizational Behavior*, 15: 245-259.
- Robinson, S. L., & Morrison, E. W. 1995. Psychological contracts and OCB: The effect of unfulfilled obligations on civic virtue behavior. *Journal of Organizational Behavior*, 16: 289-298.
- Robinson, S. L. 1996. Trust and Breach of the Psychological Contract. *Administrative Science Quarterly*, 41: 574-599.
- Rotundo, M., & Sackett, P. R. 2002. The Relative Importance of Task, Citizenship, and Counterproductive Performance to Global Ratings of Job Performance: A Policy-Capturing Approach. *Journal of Applied Psychology*, 87: 66-80.
- Saks, A. M. 2006. Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21: 600-619.
- Salanova, M., Llorens, S., Cifre, E., Martínez, I., & Schaufeli, W. B. 2003. Perceived collective efficacy, subjective well-being and task performance amongst electronic work groups: An experimental study. *Small Groups Research*, 34: 43-73.
- Salanova, M., Agut, S., & Peiro, J. M. 2005. Linking organizational resources and work engagement to employee performance and customer loyalty: The mediation of service climate. *Journal of Applied Psychology*, 90: 1217-1227.
- Salanova, M., & Schaufeli, W. B. 2008. A cross-national study of work engagement as a mediator between job resources and proactive behaviour. *International Journal of Human Resource Management*, 19: 116-131.
- Scandura, T. A., Graen, G. B., & Novak, M. A. 1986. When Managers Decide Not to Decide Autocratically: An Investigation of Leader-Member Exchange and Decision Influence. *Journal of Applied Psychology*, 71: 579-584.
- Schaufeli, W. B., Salanova, M., Gonzalez-Roma, V., & Bakker, A. B. 2002. The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3: 71-92.
- Schaufeli, W. B., & Bakker, A. B. 2004. Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study. *Journal of Organizational Behavior*, 25: 293-315.
- Settoon, R. P., Bennett, N., & Liden, R. C. 1996. Social Exchange in Organizations: Perceived Organizational Support, Leader-Member Exchange, and Employee Reciprocity. *Journal of Applied Psychology*, 81: 219-227.

- Shaw, J. D., Dineen, B. R., Fang, R., & Vellella, R. F. 2009. Employee-Organization exchange relationships, HRM practices, and quit rates of good and poor performers. *Academy of Management Journal*, 52: 1016-1033.
- Snape, E., & Redman, T. 2010. HRM Practices, Organizational Citizenship Behaviour, and Performance: A Multi-Level Analysis. *Journal of Management Studies*, 47: 1219-1247.
- Sobel, M. E. 1982. Asymptotic confidence intervals for indirect effects in structural equation models. In S. Leinhardt (Ed.), *Sociological Methodology*: 290-312. Washington DC: American Sociological Association.
- Sonnentag, S. 2003. Recovery, Work Engagement, and Proactive Behavior: A New Look at the Interface Between Nonwork and Work. *Journal of Applied Psychology*, 88: 518-528.
- Spector, P. E. 2006. Method Variance in Organizational Research: Truth or Urban Legend? *Organizational Research Methods*, 9: 221-232.
- Sun, L.-Y., Aryee, S., & Law, K. S. 2007. High-Performance Human Resource Practices, Citizenship Behavior, and Organizational Performance: A Relational Perspective. *Academy of Management Journal*, 50: 558-577.
- Takeuchi, N. 2009. How Japanese manufacturing firms align their human resource policies with business strategies: testing a contingency performance prediction in a Japanese context. *International Journal of Human Resource Management*, 20: 34-56.
- Truss, C., Soane, E. C., Edwards, C., Wisdom, K., Croll, A., & Burnett, J. 2006. *Working Life: Employee Attitudes and Engagement 2006*. Wimbledon: CIPD.
- Truss, C., Soane, E. C., Alfes, K., Rees, C., & Gatenby, M. 2010. Engaging the four types of employees. *Harvard Business Review*, 88: 24.
- Venkataraman, V., Green, S. G., & Schleicher, D. J. 2010. Well-Connected Leaders: The Impact of Leaders' Social Network Ties on LMX and Members' Work Attitudes. *Journal of Applied Psychology*, 95: 1071-1084.
- Wayne, S. J., Shore, L. M., & Liden, R. C. 1997. Perceived organizational support and leader-member exchange: A social exchange perspective. *Academy of Management Journal*, 40: 82-111.
- Wright, P. M., & Boswell, W. R. 2002. Desegregating HRM: A Review and Synthesis of Micro and Macro Human Resource Management Research. *Journal of Management*, 28: 247-276.
- Wright, P. M., & Haggerty, J. J. 2005. *Missing variables in theories of strategic human resource management: Time, cause, and individuals*. CAHRS Working Paper #05-03, Cornell University, School of Industrial and Labor Relations, Center for Advanced Human Resource Studies, Ithaca, NY.